**Homework 1-FORM A Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Points, Lines, and Planes Period: \_\_\_\_\_\_\_\_Advisor:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Failure to use complete sentences will result in a LaSalle.**

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| 1. Sketch an example of collinear points. | 2. Sketch an example of coplanar points. |
| 3. What is the difference between a ray and a line? | 4. Write the necessary notation above “AB” to demonstrate that (a.) is a line and (b.) is a line segment.   1. AB (b.) AB |
| 5. Use the diagram to decide whether the given statement is *true* or *false*.   1. Points E, G, and F are collinear. \_\_\_\_\_ 2. ~~Points E, G, and F are coplanar. \_\_\_\_\_~~ 3. Points *H*, *I*, and *G* are collinear. \_\_\_\_\_ 4. ~~Points~~ *~~H~~*~~,~~ *~~I~~*~~, and~~ *~~J~~* ~~are coplanar. \_\_\_\_\_~~ | |
| http://image.tutorvista.com/Qimages/QD/39197.gif  6. Name 1 set of 3 points in the figure above that are collinear.  \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ | http://image.tutorvista.com/Qimages/QD/50234.gif  7. Name 1 set of 3 points in the figure above that are coplanar.  \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ |

**Mixed Review**

Use substitution to determine whether the given point is on the line.

**PLUG IN x AND y WITHIN THE EQUATION!**

**CHECK TO SEE IF THE EQUATION WORKS!**

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| ~~1.~~ *~~y =x~~* ~~+ 4~~*~~; A~~*~~(3, 7)~~ | 2. *y* = *x* –5; *A*(1, 6) |
| 3. *y* = –*x* –2; *A*(–8*, –*10) | ~~4.~~ *~~y~~* ~~= 5~~*~~x~~* ~~+ 3;~~ *~~A~~*~~(1,8)~~ |
| ~~5.~~ *~~y~~* ~~= −~~*~~x~~* ~~+ 3;~~ *~~A~~*~~(6,3)~~ | 6. y = −3*x* − 6; *A*(2,0) |
| 7. 2*x*−*y* = 7; *A*(3,−1) | ~~8.~~ *~~x~~* ~~+ 6~~*~~y~~* ~~= 40;~~ *~~A~~*~~(−l0, 5)~~ |
| 9. Describe in your own words the steps to using substitution to check for a point. | |
| 10. Rearrange the equation in number 7 so that it is in *y=m(x)+b* form.  2*x*−*y* = 7; *A*(3,−1) | |